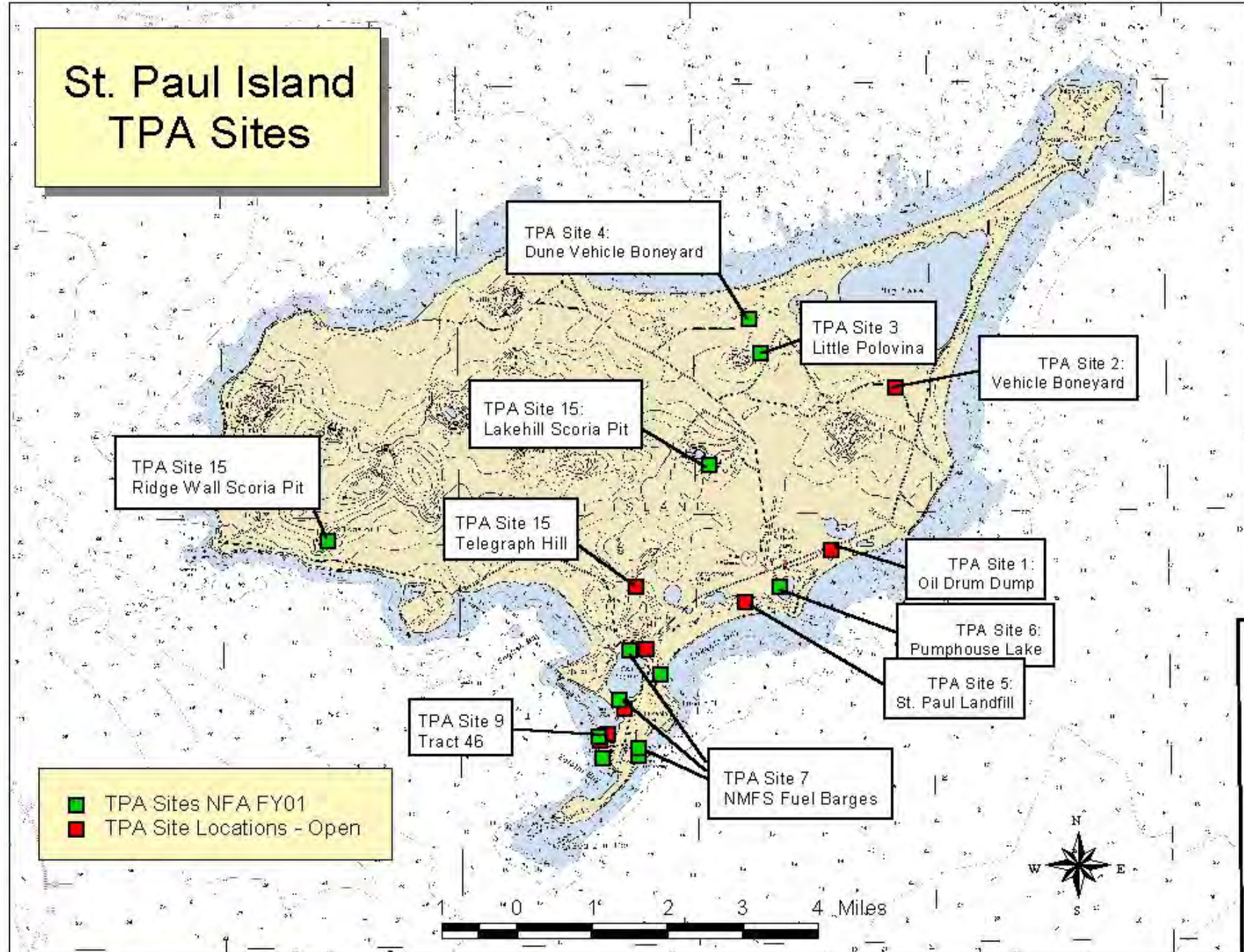


THE PRIBILOF ISLANDS ENVIRONMENTAL RESTORATION PROJECT

NATIONAL OCEAN SERVICE

OFFICE OF RESPONSE AND
RESTORATION

St. Paul Island TPA Sites



St. Paul TPA Sites Southwest Section

The map displays the following TPA sites and locations:

- TPA Site 7: Barge A
- TPA Site 7: Barge B
- TPA Site 9: Tract 46
- TPA Site 10: Gasoline Tank Farm
- TPA Site 11: Diesel Tank Farm
- TPA Site 8: NOAA Cliffside Landfill
- F/V Ocean Clipper
- TPA Site 14: Icehouse Lake
- TPA Site 12: Lukanin Bay
- TPA Site 13: Diesel Seep
- TPA Site 7: Barge D
- TPA Site 7: Barge C

Legend:

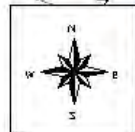
- TPA Sites- NFA FY 01 (Green square)
- TPA Site Locations - Open (Red square)

Geographic Features and Landmarks:

- English Bay
- Tolstoi Pt
- Village Cove
- Salt Lagoon
- Lukanin Hill
- Lukanin Pt
- Kirovi Pt
- Black Islands
- St. Paul
- East Lagoon
- Tolstoi Bay
- Reef Pt
- Sea Lion Rock
- Breakers
- Paul

Scale and Orientation:

- Scale: 0 to 4000 Feet
- Compass Rose showing North (N), South (S), East (E), and West (W).



01 Feet 10, 2000 4000 Feet

Island Project Status Report - St. Paul Island

Summary of FY00 Activities

[Island Map](#)
[Village Map](#)

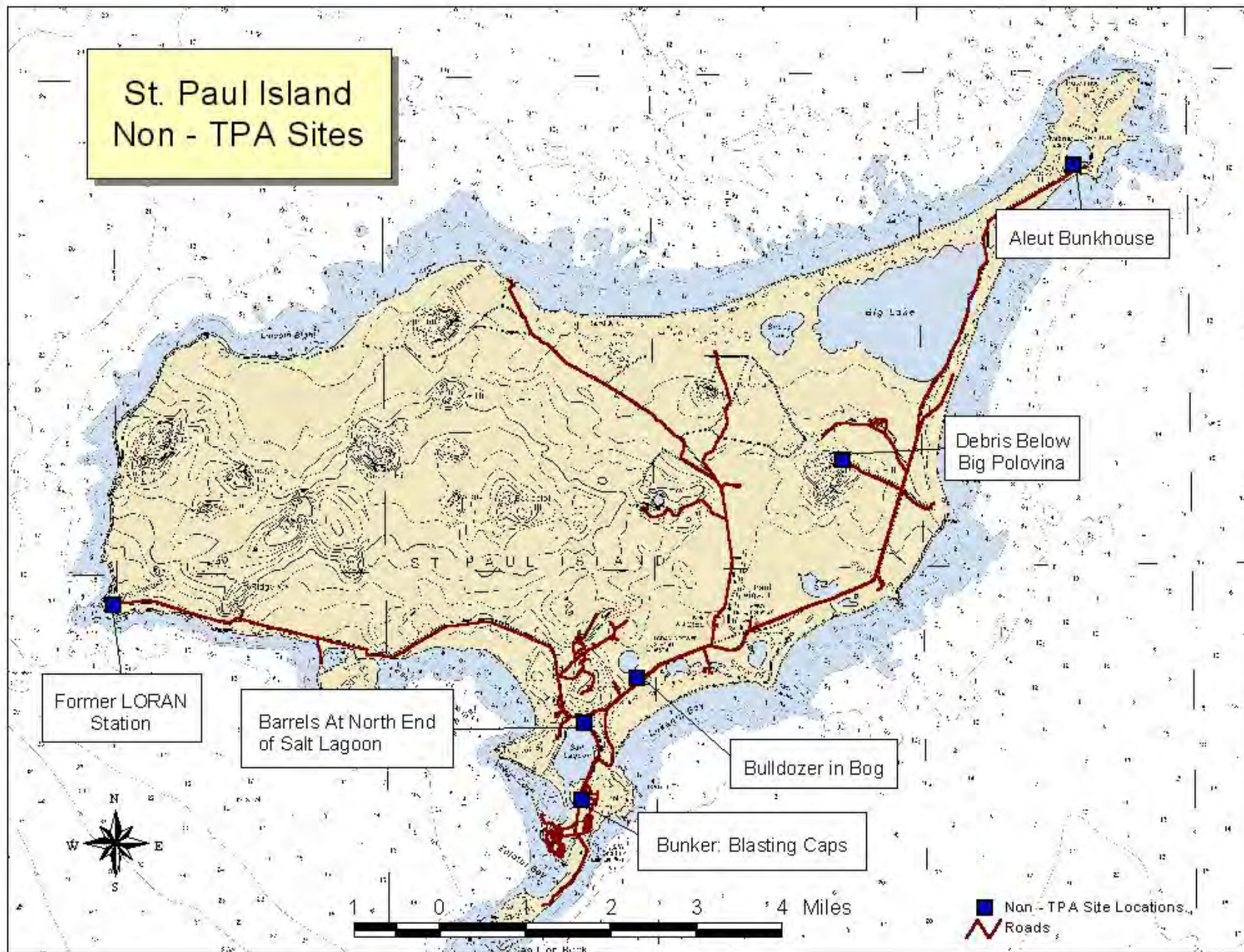
TPA Site No	Site Name	FY00 Activity	Site Maps/Images
NA	Geodetic Control	Reset Control Points Updated NOAA Charts USGS Topo Maps Aerial/Satellite Imagery	Map
NA	Scoria Pits/Blubber Dump	Boundary Resurveys	
NA	Island-Wide Debris Removal	Approx. 750 Tons; plus wood debris	
NA	Barrel Removal Used Oil Treatment	Approx. 800 Barrels	
NA	Blubber Dump PCS	Treated 1500 yds ³	
NA	Island Stratigraphy	USGS Seismic Survey	Map
1	Oil Drum Dump	Site Characterization	Well Field Map
2	Vehicle Boneyard FUDS Disposal Site	Site Characterization	Well Field Map
3	Little Polovina Boneyard	Site Closed/No Activity	

4	Dune Vehicle Boneyard	Debris Removal	
5	St. Paul Landfill (Cell C-Active Landfill)	Boundary Survey Site Characterization Test Pitting Fence Installation	Well Field Map
	Cell A	Barrel Removal Actions Partial Closure	
	Cell B	Site Characterization	
6	Pumphouse Lake	Debris Removal/Restoration	
7	NMFS Fuel Barges	Debris Removal	
8	Cliffside Landfills	Debris Removal	Map Link
9	Tract 46	Site Characterization Debris Cleanup Bldg. Demolition/Cleanup	Contaminant Plume
10	Former Gas Tank Farm	Site Closed/No Activity	
11	Diesel Tank Farm	Site Characterization	Well Field Link
12	Lukanin Bay Debris	Debris Removal/Restoration	
13	Salt Lagoon Diesel Seep	Site Characterization	Map Link
14	Icehouse Lake	Site Characterization	Map Link
15	Scoria Pits: Telegraph Hill	Site Characterization	Well Field Link
	Lake Hill	No Activity	
	Ridgewall	No Activity	

Island Map

Village Map

St. Paul Island Non - TPA Sites



NON-TPA SITES: ST. PAUL ISLAND FY00 ACTIVITIES

Non-TPA Sites Map

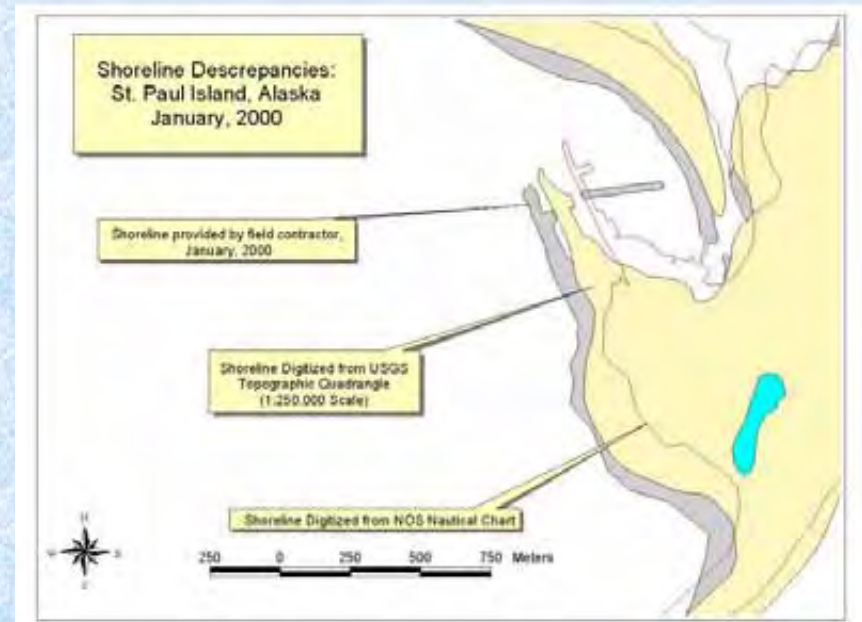
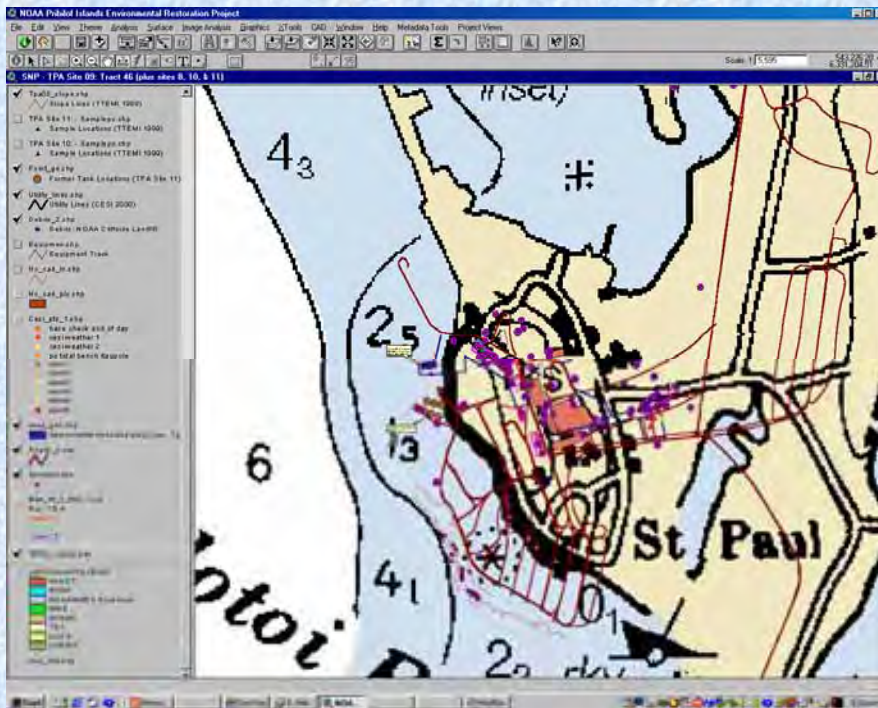
Site Name	Pre 4/99 NFA Status	FY 99 Status	FY00 Status	FY01 Status	Link
Aleut Bunkhouse	Open	Open	Open	Request	Picture
Bulldozer in Bog	Open	Open	Open	Request	
Barrels at North End of Salt Lagoon	Open	Open	Open	Request	Map
Debris Below Big Polovina	Open	Open	Open	Request	Picture
SW Point Former LORAN Station	Open	Open	Open	Request	Picture
Bunker Blasting Caps	Open	Open	Open	Request	

NOAA Pribilof Project Website

<http://response.restoration.noaa.gov/pribilof>

Geodetic Control Corrections

Using GPS and existing maps, The project mapped sample locations and other features. These points plotted incorrectly on the NOS chart. (See below: Points plotting in the Bering Sea)

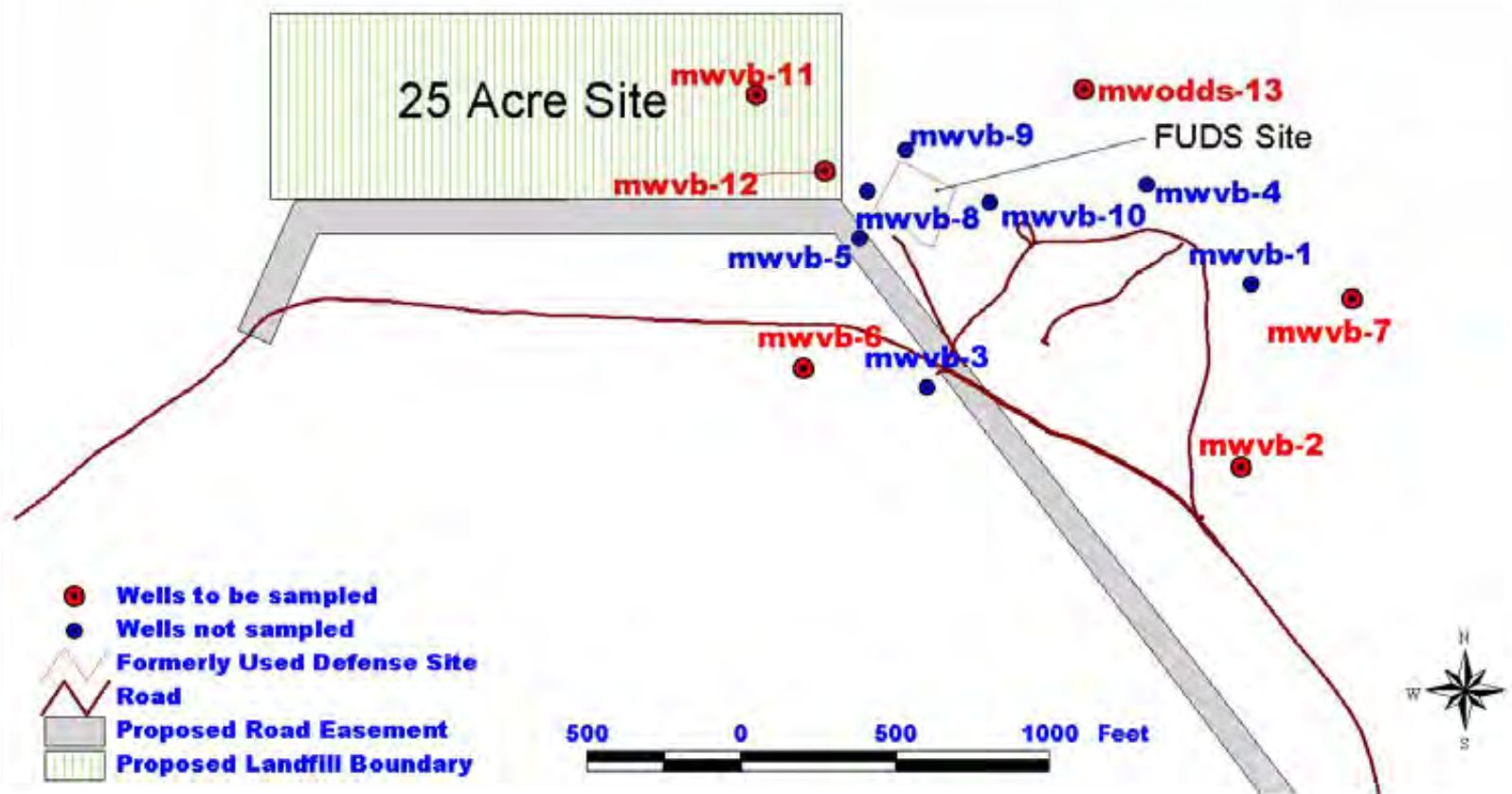


In March of 2000, the project located three new 1st class NGS benchmarks on each island. Previously, St. George Island had no benchmarks of sufficient quality and St. Paul had only one "B" order benchmark last surveyed in 1996.

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TPA Site 2: Vehicle Boneyard Proposed Well Sampling Plan FY '01 First Quarter



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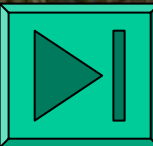
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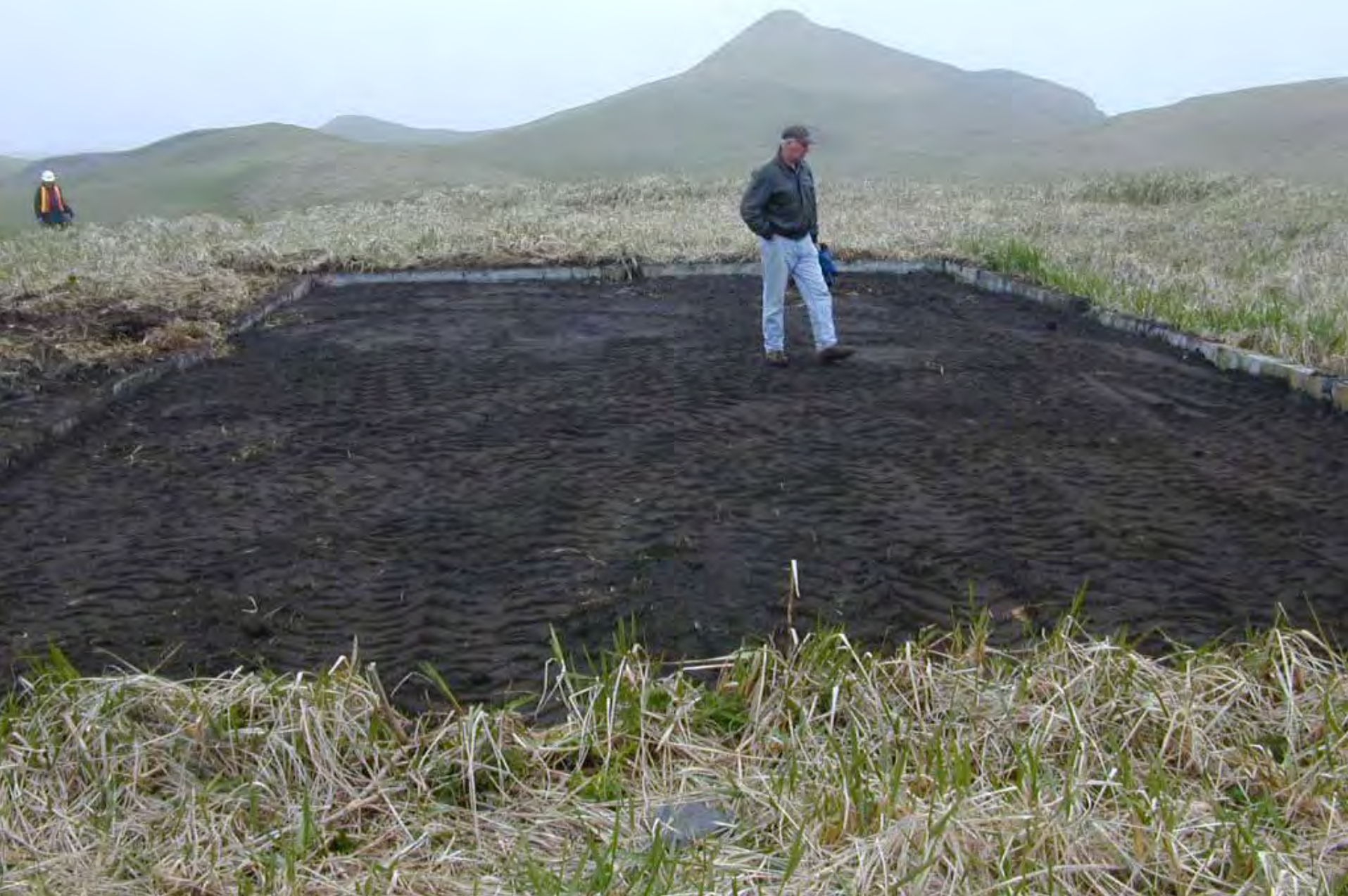
Former Aleut Bunkhouse Site



Aleut Bunkhouse Debris Removal: June 2000



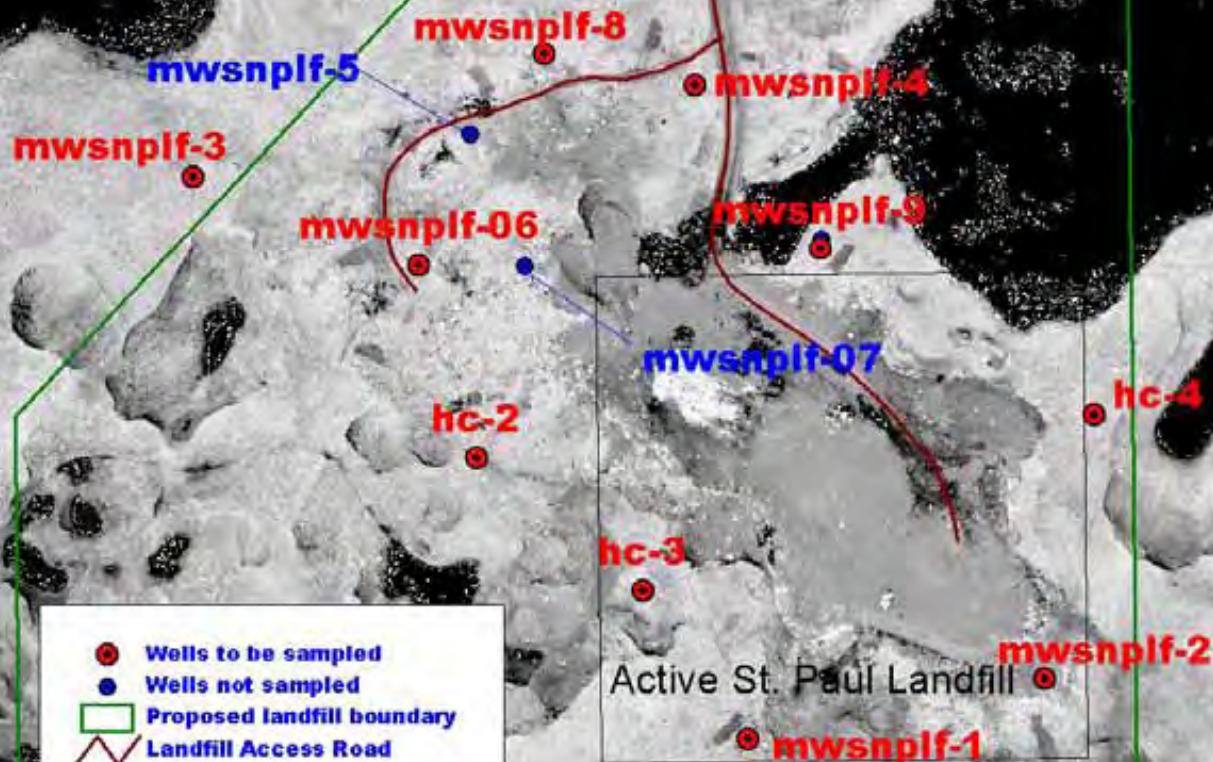
Bunkhouse Foundation



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TPA Site 5: St. Paul Landfill
Proposed Well Sampling Plan
FY '01 First Quarter





100 0 100 200 300 400 500 Feet



Tract 46 Proposed Well Sampling Plan FY '01 First Quarter



250 0 250 500 750 Feet





Telegraph Hill Proposed Well Sampling Plan FY '01 First Quarter



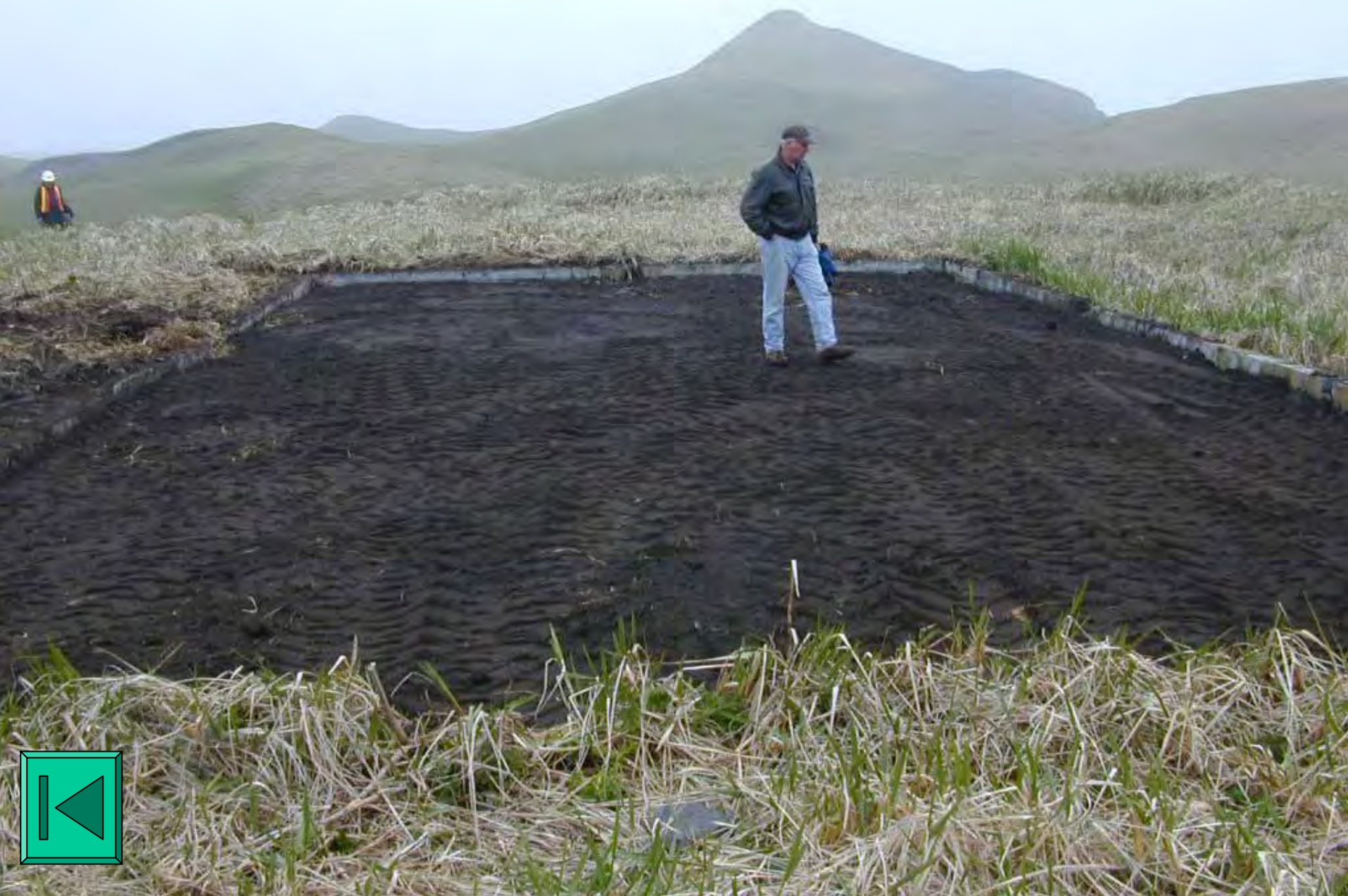
Former Aleut Bunkhouse Site



Aleut Bunkhouse Debris Removal: June 2000



Bunkhouse Foundation

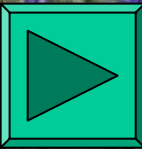


Battery Debris from
Former LORAN Station





Crew Removing Lead
Contaminated Soil



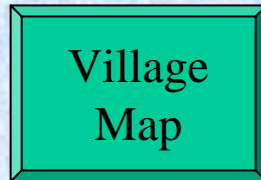
Cleaned Site with Scoria Cover



Island Project Status Report - St. George Island

Summary of FY00 Activities

TPA Site No.	Site Name	FY 00 Activity	Site Maps/Images
NA	PCS Stockpile	Treated 4500 yds ³ ETC Results	Harbor Pic ETC Unit
NA	Geodetic Control	Reset Control Points Updated NOAA Charts USGS Topo Maps Satellite Imagery	
NA	Barrel and Battery Removal	Approx. 30 Barrels	
NA	Island Stratigraphy	USGS Seismic Survey	
1	Former Diesel Tank Farm	No Activity	
2	Former Drum Storage Area	No Activity	
3	Inactive Gas Station	No Activity	
4	Active Landfill	Test Pitting Groundwater Modeling Initiated Closure	Picture Map



St. George Site Status, continued

5	Ocean Dump Site	No Activity	
6	Open Pits Site	No Activity	
7	Ballfield/Former Landfill	Reopened Site/No Activity	Picture
8	Active Power Plant	No Activity	
9	Old Power Plant	No Activity	
10	Former Drum/AST Storage Area	NFA 8/18/97	
11	Cottage C UST	No Activity	
12	Former Hanger Bldg.	No Activity	
13	Makushin Pit	NFA 8/18/97	
14	Oil Drum Dump	No Activity	
15	Boneyard B	No Activity	Picture
16	Boneyard C	No Activity	
17	Cross-Hill Dump	NFA 8/18/97	
18	Former Fuel Storage Area	No Activity	
19	Old Carpenters Shop	No Activity	
20	Old Coal House	NFA 9/15/97	
21	Abandoned City Diesel Tank Disposal Site	No Activity	
22	UST Closure	No Activity	
23	Abandoned Diesel Tank Farm	No Activity	
24	Inactive Gas Tank Farm	No Activity	
25	Port Fuel Supply Line	No Activity	
Pre-TPA	St. George Schoolyard/landfill	No Activity	

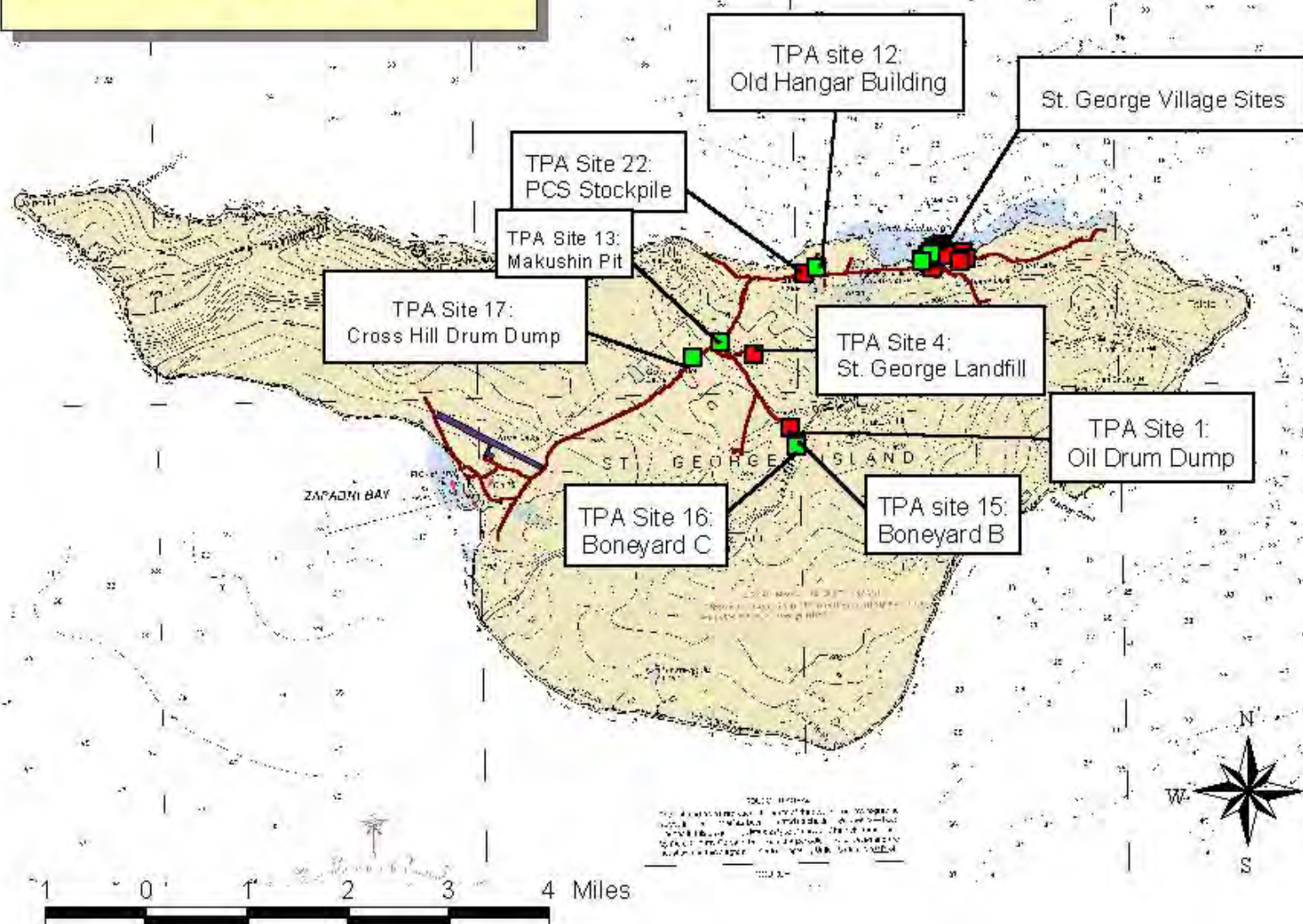
**Island
Map**

**Village
Map**

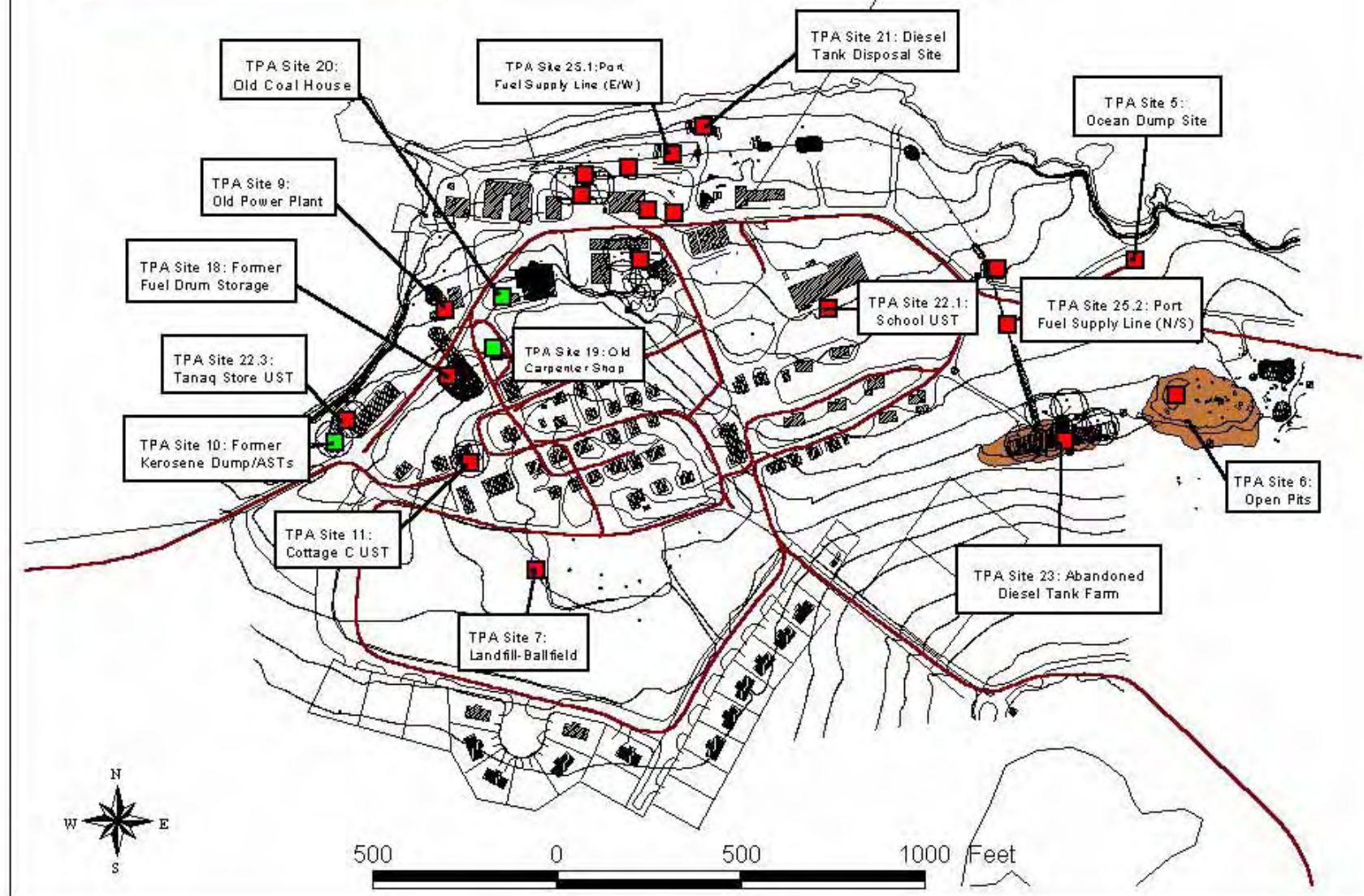
**Oceanfront
Map**

**NFA Request
Sites**

St. George Island TPA Sites



St. George Village TPA Sites



TPA SITES: STATUS & SCHEDULE ON ST. PAUL ISLAND

TPA Site No.	Site Name	Pre 4/99 NFA Status	FY00 Status	FY01 Activity (1) = Planned Activity (2) = Funding Dependent
1	Oil Drum Dump	Open	Open	FUDS overlap
2	Vehicle Boneyard	Open	Open	(1) Characterize Buried Debris
3	Little Polovina Boneyard	Open	NFA 3/3	Closed
4	Dune Vehicle Boneyard	Open	Open	NFA Request
5	St. Paul Landfill Cell C	Open	Open	(1) Closure Design
	Cell A	Open	Open	(1) Closure Design
	Cell B	Open	Open	(1) Corrective Action
6	Pumphouse Lake	Open	Open	NFA Request
7	NMFS Fuel Barges	Open	Open	NFA Request
8	Cliffside Landfills	Open	Open	NFA Request
9	Tract 46	Open	Open	(1) Site Characterization (2) Initiate Corrective Action

TPA SITES: STATUS & SCHEDULE ON ST. PAUL ISLAND (Continued)

10	Former Gas Tank Farm	Open	NFA 2/24	Closed
11	Diesel Tank Farm	Open	Open	(2) Corrective Action
12	Lukanin Bay Debris	Open	Open	(1) Evaluation for NFA
13	Salt Lagoon Diesel Seep	NFA 11/2/95	Voluntary Reopen	(1) Upland Remedial Design (1) Lagoon Environmental Assessment
14	Icehouse Lake	Open	Open	(1) Site Characterization (2) Corrective Action
15	Scoria Pits			FUDS overlap
	Telegraph Hill	Open	Open	FUDS
	Lake Hill	Open	Open	NFA Request
	Ridgewall	Open	Open	FUDS
NA	PCS Treatment			(1) ETC Upgrade; Treat 5000 yds ³
NA	Groundwater Well Monitoring			(1) TPA Sites: 2, 5, 9, 11, 15

NON-TPA SITES: CLOSURE STATUS ON ST. PAUL ISLAND

Non-TPA Sites Map

Site Name	Pre 4/99 NFA Status	FY 99 Status	FY00 Status	FY01 Status	Link
Aleut Bunkhouse	Open	Open	Open	Closure Request	Picture
Bulldozer in Bog	Open	Open	Open	Closure Request	
Barrels at North End of Salt Lagoon	Open	Open	Open	Closure Request	Map
Debris Below Big Polovina	Open	Open	Open	Closure Request	Picture
SW Point Former LORAN Station	Open	Open	Open	Closure Request	Picture
Bunker Blasting Caps	Open	Open	Open	Closure Request	

FUDS: CLOSURE STATUS ON ST. PAUL ISLAND

TPA Site No.	Site Name	Pre 4/99 NFA Status	FY 99 Status	FY00 Status	FY01 Status
1		Open			
2		Open			
3		Open		Received	
4		Open			Request
5		Open			
6		Open			Request
7		Open			Request
8		Open			Request
9		Open			
10		Open		Received	
11		Open			
12		Open			Request
13		Closed		Reopened	
14		Open		Closed 3/3	Reopened
15		Open			

TPA SITES: STATUS and SCHEDULE ON ST. GEORGE ISLAND

TPA Site No.	Site Name	Pre 4/99 NFA Status	FY 00 Status	FY01 Activity (1) = Planned Activity (2) = Funding Dependent
NA	PCS Stockpile			(1) ETC Upgrade; Treat 5000 yds ³
1	Former Diesel Tank Farm	Open	Open	(1) Site Characterization
2	Former Drum Storage Area	Open	Open	(1) Site Characterization
3	Inactive Gas Station	Open	Open	(1) Site Characterization
4	Active Landfill	Open	Open	(1) Complete Cover
5	Ocean Dump Site	Open	Open	NFA Request
6	Open Pits Site	Open	Open	(2) Corrective Action
7	Ballfield/Former Landfill	NFA 9/15/97	Reopened 10/25	(1) Remedial Design (2) Corrective Action
8	Active Power Plant	Open	Open	(1) Site Characterization
9	Old Power Plant	Open	Open	(1) Site Characterization
10	Former Drum/AST Storage Area	NFA 8/18/97	Closed	Closed

TPA SITES: STATUS and SCHEDULE ON ST. GEORGE ISLAND (Continued)

11	Cottage C UST	Open	Open	(1) Site Characterization
12	Former Hanger Bldg.	Open	Open	NFA Request
13	Makushin Pit	NFA 8/18/97	Closed	Closed
14	Oil Drum Dump	Open	Open	(1) Site Characterization
15	Boneyard B	Open	Open	(1) Site Characterization
16	Boneyard C	Open	Open	NFA Request
17	Cross-Hill Dump	NFA 8/18/97	Closed	Closed
18	Former Fuel Storage Area	Open	Open	(1) Site Characterization
19	Old Carpenters Shop	Open	Open	NFA Request
20	Old Coal House	NFA 9/15/97	Closed	(1) Site Characterization
21	Abandoned City Diesel Tank Disposal Site	Open	Open	(1) Site Characterization
22	UST Closure	Open	Open	(1) Site Characterization
23	Abandoned Diesel Tank Farm	Open	Open	(1) Site Characterization
24	Inactive Gas Tank Farm	Open	Open	(1) Site Characterization
25	Port Fuel Supply Line	Open	Open	(1) Site Characterization

NON-TPA SITES: STATUS and SCHEDULE ON ST. GEORGE ISLAND

Pre-TPA	St. George Schoolyard/landfill	UST NFA 11/21/95	Open	(1) Remedial Design (2) Corrective Action
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FUDS: CLOSURE STATUS ON ST. GEORGE ISLAND

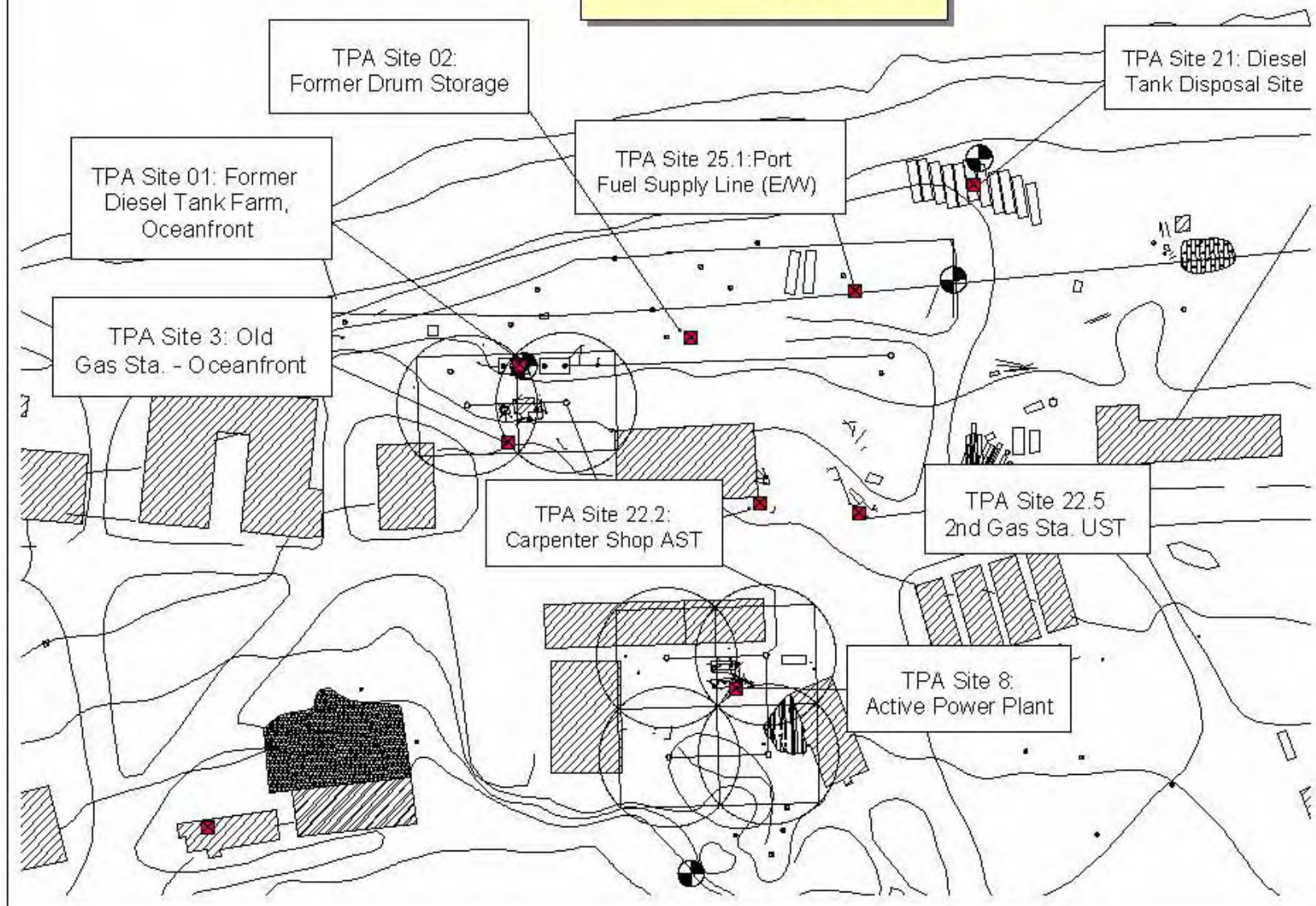
TPA Site No.	Site Name	Pre 4/99 NFA Status	FY 99 Status	FY00 Status	FY01 Status
1		Open			
2		Open			
3		Open		Received	
4		Open			Request
5		Open			
6		Open			Request
7		Open			Request
8		Open			Request
9		Open			
10		Open		Received	
11		Open			
12		Open			Request
13		Closed		Reopened	
14		Open		Closed 3/3	Reopened
15		Open			

ETC Treatment Results

St. George						
Treatment No.	Cell No.	Start Date	End Date	Sample Date	Cubic Yards	Sample Results
1	1a	6/9/00	6/22/00	6/24/00	300	Bottom layer had DRO hits. Removed top layers and left bottom DRO on bottom(106,114) Run PAH's. They were good. Two benzene hits(.117, .0209) in middle and top layer. Retreated 1/6 th of cell.
2	2a	7/8/00	7/23/00	7/26/00	350	
3	1b	7/27/00	8/7/00	8/26/00	500	All samples good.
4	3a	8/10/00	8/22/00	8/26/00	440	One benzene hit (.0276). Retreated 1/8th of cell.
5	2b	8/31/00	9/12/00	9/13/00	440	One benzene hit (.0254). Retreated 1/8th of cell.
6	1c	9/14/00	9/26/00	09/28/00	500	All samples good.
7	3b	9/28/00	10/9/00	10/24/00	500	All samples good.
8	2c	10/10/00	10/24/00	10/24/00	440	Two Benzene hits (.0428 and .0316). Retreat 64 yards
9	1d	10/28/00	11/7/00		440	One benzene hit. Retreated 1/8th of cell.
10		11/22/00	12/8/00		440	One benzene hit. Retreated 1/8th of cell.
Total					4350	

TPA Site Number	Name	Recommended Action	Previous Investigations		
			Hart Crow ser	Woodw ard Clyde	Polarconsult
12	Former Hangar Building	NFA based on Polarconsult Report (1997)			x
15	Boneyard B	NFA based on Polarconsult Report (1997)			x
16	Boneyard C	NFA based on Polarconsult Report (2000)			x
19	Old Carpenter Shop	NFA based on Hart Crow ser (1997) and USN (1999)	x		
22-4	Airport Hangar Aviation Gasoline UST	NFA based on Polarconsult Report (1997)			x
22-5	Second Inactive Gas Station (Oceanfront)	NFA based on Polarconsult Report (1997)			x

St. George Waterfront TPA Sites



Buried Drums at Lukannin Bay



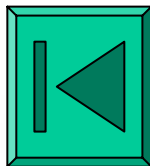
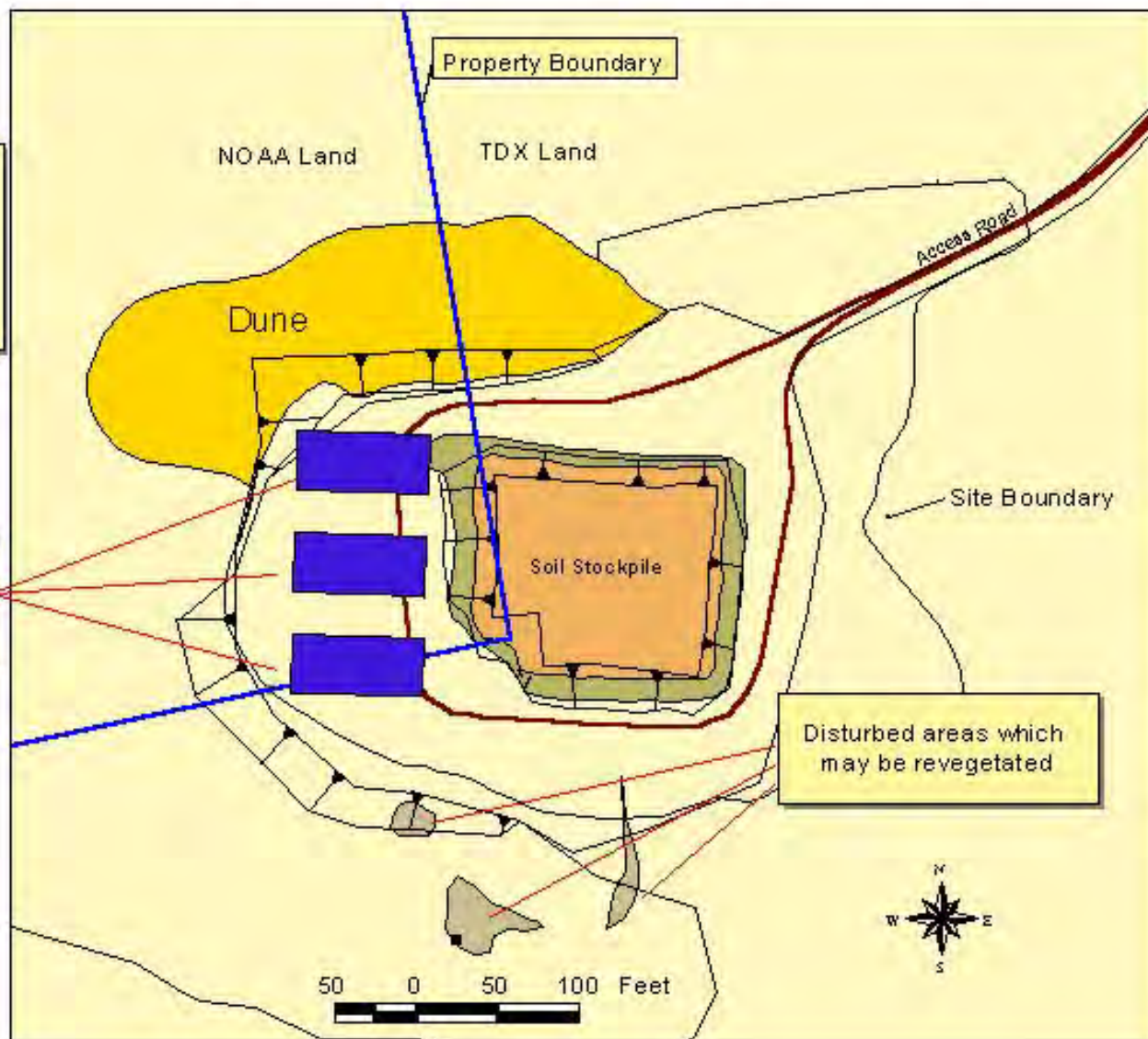


Blubber Dump Stockpile and Soil Treatment Area, St. Paul Island, AK

The Soil Stockpile contains approximately 14,000 tons of Petroleum Contaminated Soil (PCS). Each treatment cell can treat 550 - 700 tons at once.

Enhanced Thermal Conduction Soil Treatment Cells

Disturbed areas which may be revegetated



Panoramic View of Tract 46 showing area of contamination



St. George Landfill



TPA Site 15: Boneyard B





TPA Site 13: Salt Lagoon Diesel Seep
TOPA Site 14: Tract 50

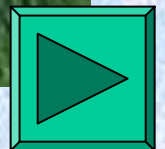


St. George Landfill













Enhanced Thermal Conduction Soil Treatment Unit: St. George Island



Debris Removal



St. Paul Village

Debris at NMFS
Cliffside Landfill

Debris at NOAA Landfill

500 0 500 1000 1500 2000 Feet



St. Paul TPA Site 8:
NOAA/NMFS Landfills



TPA Site 1: Oil Drum Dump Site

